

## INTERNATIONAL SEARCH REPORT

IB 03/05023

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01M2/16 H01M2/18 H01M10/28

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| X          | PATENT ABSTRACTS OF JAPAN<br>vol. 1996, no. 01,<br>31 January 1996 (1996-01-31)<br>& JP 07 245091 A (MATSUSHITA ELECTRIC IND<br>CO LTD), 19 September 1995 (1995-09-19)<br>abstract | 1-17                  |
| X          | PATENT ABSTRACTS OF JAPAN<br>vol. 007, no. 178 (E-191),<br>6 August 1983 (1983-08-06)<br>& JP 58 082465 A (MATSUSHITA DENKI SANGYO<br>KK), 18 May 1983 (1983-05-18)<br>abstract     | 1-17                  |
| X          | US 6 270 833 B1 (YAMASHITA KATSUHIRO ET<br>AL) 7 August 2001 (2001-08-07)<br>cited in the application<br>column 3, line 45 - column 4, line 20<br>-----<br>-/--                     | 1-17                  |

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

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- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

18 June 2004

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
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| A          | US 6 099 987 A (DANIEL-IVAD JOSEF ET AL)<br>8 August 2000 (2000-08-08)<br>cited in the application<br>column 3, line 66 - column 4, line 35<br>----- | 1-17                  |
| A          | US 6 541 152 B1 (KODA MINORU ET AL)<br>1 April 2003 (2003-04-01)<br>column 7, line 42 - column 8, line 5<br>-----                                    | 1-17                  |

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| Patent document<br>cited in search report |    | Publication<br>date | Patent family<br>member(s) |               | Publication<br>date |
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| JP 58082465                               | A  | 18-05-1983          | NONE                       |               |                     |
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